

AIRREX AIR CONDITIONER

WATER COOLED

MODEL : HWC-15

- ▶ Thank you for purchasing an Airrex Portable Air Conditioner. Please read the instructions thoroughly before operating.
- ▶ After reading the instructions, please keep them in a safe place accessible to all users.
- ▶ Ensure you read the 'safety precautions' in advance and use the product correctly.
- ▶ The product is specified for use with a power supply of 115V a.c. 60Hz.
- ▶ This manual includes the product warranty.
- ▶ Specifications and contents of this manual may be changed without prior notice, in accordance with our commitment to product quality improvement, design and control.



CONTENTS

■ SAFETY INSTRUCTIONS	3~4
■ PRECAUTIONS FOR USE	4
■ NAME OF PARTS	
· MAIN BODY	5
· CONTROL PART	6
■ HOW TO USE	
· HOW TO OPERATE	7
· SELECTION of ROOM or SPOT COOLING	7
· TEMPERATURE CONTROL/ ERROR INDICATION	8
■ HOW TO INSTALL & PRECAUTIONS	9~10
■ CLEANING AND MAINTENANCE	11
■ TROUBLE SHOOTINGS	12
■ SPECIFICATIONS & ACCESSORIES	13
■ WARRANTY	14

SAFETY INSTRUCTIONS

These are contents for keeping the safety and preventing the property damage. Please read and use correctly.

- Precautions at this page are for the safe and correct use of the unit and for the preventing a danger and damage of the operator or others. With regard to the contents, these are classified into 〈WARNING〉 and 〈CAUTION〉. These are important for the safety, so please observe them without fail.

 **WARNING** This is the content that when a faulty handling is done, a person's death or heavy injury is expected.

 **CAUTION** This is the content that when a faulty handling is done, a person's injury or property damage is expected.

Meaning of the figural symbol

 indicates a prohibition.  indicates a matter that must be done without fail.

 **WARNING** As for a damage that occurs during non-keeping the following cautions, the manufacturing company cannot be responsible for the compensation.

- | | | | |
|---|--|---|---|
|  ! | Use an outlet for exclusive use of alternative current 115V
(A fire or electric shock may be caused.) |  ! | After wipe out dusts from the power plug, insert it correctly into outlet
(Due to electric shock or short, a smoking or fire may happen.) |
|  ! | Do not use a damaged electric cord, plug or loosened outlet
(An electric shock, short or fire may be caused.) |  ! | Use a rated capacity fuse.
(A trouble or fire may be caused.) |
|  ! | Do not pull out the cord or touch the power plug with a wet hand
(An electric shock, fire may be caused.) |  ! | Do not forcibly bend the cable or be pressed by a heavy thing for not being damaged.
(Electric shock or fire may be caused.) |
|  ! | Do not connect or extend a power cord in the middle of it
(An electric shock, fire may be caused.) |  ! | Insert a cord into the outlet with earthed terminal.
(In case of common outlet, set a separate earth terminal without fail.) |
|  ! | When cleaning, pull out the plug without fail
(An electric shock may be caused.) |  ! | When water supply is stopped or leaked,
do not operate the unit. |
|  ! | Do not connect other power outlet, or do not other home appliance by using extension cord. |  ! | Do not randomly disassemble or remodel the product.
(A trouble, electric shock, or fire may be caused.) |
|  ! | Do not insert a finger or stick into blowing hole.
Hurt may be caused, so give a warning to children. |  ! | In case of a strange sound or smell in the air conditioner, stop the operation and cut off the power, and contact the Service Center.
(A continuous operation in abnormal condition, a trouble, electric shock, fire may be caused.) |

♣ After reading carefully, keep it where any user may see it anytime.

SAFETY INSTRUCTIONS

⚠ CAUTION

For the damage occurred due to non-keeping of following matters, the manufacturer is not responsible for the compensation.

- | | |
|---|---|
|  Do not install the product on the uneven or slant place. |  When thunder, lightning or no-operation for a long time, pull the power plug out of the outlet.
(Electric shock, leakage or fire may be caused.) |
|  For safekeeping, avoid hot, humid place, and keep it in dry indoor place.
(Rusting or trouble may be caused.) |  When inserting/ pulling out the power plug, grip the plug.
(A fire may be caused by electric shock or short-circuit.) |
|  In case of power cord's damage, contact A/S Center for changing it.
(Electric shock or fire may be caused.) |  Do not spray water on to the cooler nor use solvents such as benzene, thinner or alcohol for cleaning.
(There is a risk of electric shock and / or short circuit) |
|  Dot not step on the product or put a thing on it.
(Trouble or electric shock may be caused.) |  Excessive cold wind may be harmful to health. |
|  During operation, do not pull off the water supply hose or the drain hose.
Water leakage or fire damage may be caused. |  Do correctly the grounding device work without fail. However, do not connect to the gas pipe, water pipe or telephone line.
(If the grounding device is not set, a trouble or electric shock may be caused.) |
|  For preventing water leakage, close the water supply valve. | |

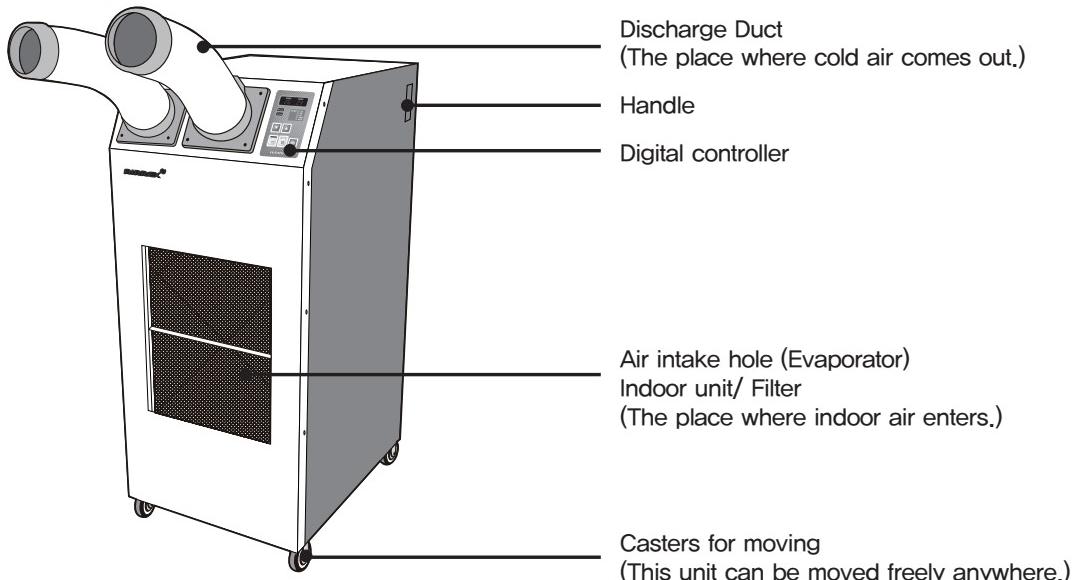
PRECAUTIONS FOR USE

1. Rated voltage of this product is 115V/60Hz.
Connect to the rated power source and the earthed outlet.
2. Make sure the safety of the place to be used.
3. Do not touch the power cord with a wet hand.
4. When moving this product, do not lean more than 30° or topple it. (When operating, keep it horizontal, or in unavoidable situation, keep it less than 2°.)
5. Do the exclusive power circuit for the air conditioner.
6. Do not pull the power cord.
(If the power cord is damaged, a fire or electric shock may be caused.)
7. Use the standardized fuse without fail.
8. Operate efficiently the unit under the shadow, and avoid operation in the temperature higher than 113°F.
9. Keep space more than 8 inch around the air-intake so that a smooth in-taking of air can be done.
10. As dust in the filter or the heat-exchanger deteriorates the cooling, do clean the filter of the heat-exchanger regularly.
11. When using the product, use it indoor place free from direct sunlight.
12. Do not use this product as a means of moving other heavy goods or as a carrier of man.
13. Do not insert any foreign substance (can, bottle of drink) into cold air discharge hole. It may damage the product.
14. Do not put an obstacle in front of the air-intake hole.
(Trouble may be caused.)
15. The optimum distance between the worker and the discharge duct is less than 80 inch.
16. When use, fix the locking device of front wheel at ON.
(For release, press OFF.)
17. Do not use it, when water supply is stopped.
(When water stoppage, re-operating is possible up to 2 times, and in case of water stoppage or shortage, the error E1 is shown and the operation will be stopped.)
18. If the water supply is low, the product cannot be normally operated, and main parts may be damaged.
19. Discharged water is in state that removed indoor heat is added to the pure tap water, thus the waste heat can be re-used for other purpose.
(But, it cannot be used as drinking water.)

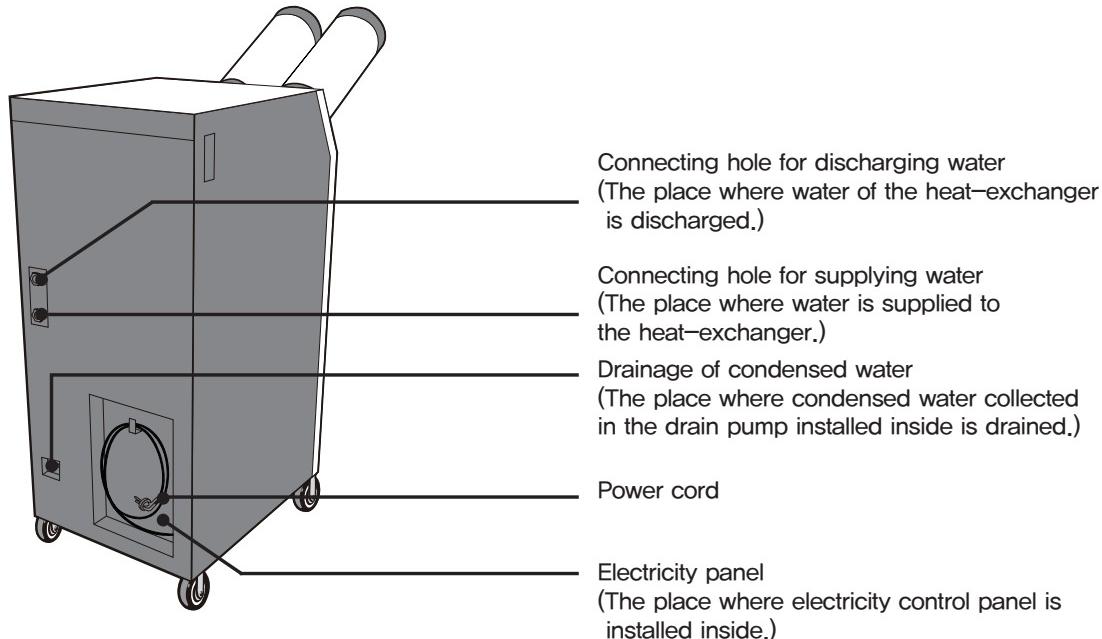
NAME OF PARTS

◆ For the efficiency improvement of this product, the specification may be changed without prior notice.

Front Side



Back Side



NAME OF PARTS

Control Part



- ① **POWER :** It is used for ON/OFF
- ② **Air Volume Control :** High and Low for the discharging air volume. (Initial setting : High)
- ③ **Cool:** It is used for choosing the cooling and blowing operation, and when in cooling operation, it is automatically controlled in accordance with the set temperature. (Initial setting: Cooling operation)
- ④ **Cooling Lamp:** It lights on when choosing the cooling operation.
- ⑤ **Temperature Control :** For controlling the setting temperature, choose ▲ (UP) or ▽ (DOWN).
- ⑥ **COMP Lamp:** It lights on when the compressor is operated.
- ⑦ **Room Lamp:** It lights on when the room temperature is shown or the unit is operated by the room temperature.
- ⑧ **Current Temperature or Error Lamp:** It shows the spot or room temperature. When a trouble occurs during operation, it shows the error state information.
(E1: High Pressure, E2: Low Pressure, E3: Sensor, AF: Prevention of Freezing, FU: Water Overflow)
- ⑨ **Set Temperature:** It shows the set temperature desired.

HOW TO USE

How to operate

1. Operation & Stop

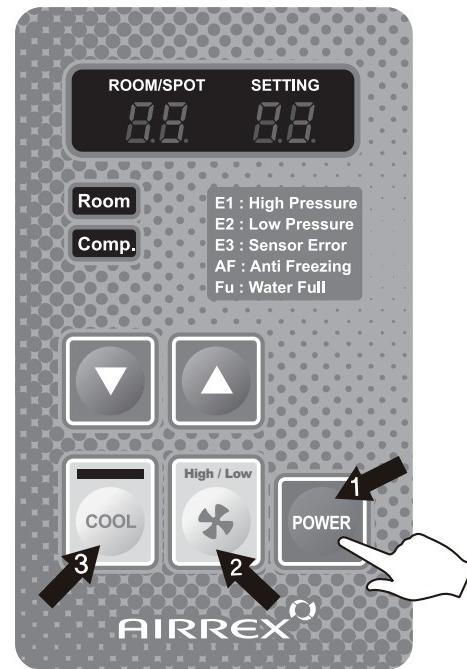
- Confirm that the power cord is connected to the outlet.
- Press the Power button, and the operation starts automatically. At this time, it is operated as the basically Cool mode and Fan speed High.
- While operation, press the Power Button, and all operations will be stopped.

2. Air Volume Control

- By pressing the air volume control button while operation, choose the desired air volume. At this time, 'F-Hi' in case of strong, 'F-Lo' in case of weak is shown for one second.

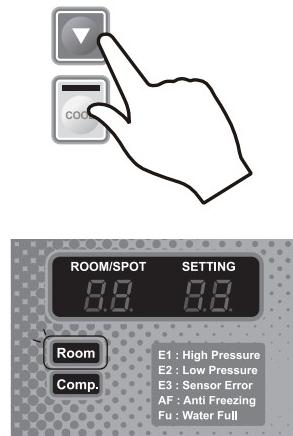
3. Cooling & Blowing Operation

- Whenever pressing the Cool Button, the cooling or the blowing operation can be chosen.
- When the cooling operation is chosen, the Cool Button lights on.
- If the cooling operation is chosen while the blowing operation, the compressor may start in 3 minutes for the protection of the compressor.
(When the compressor is run during the cooling operation, the Comp Lamp lights on.)



Selection of Room or Spot cooling

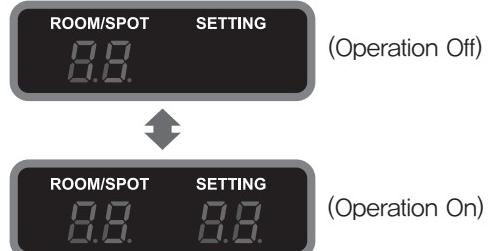
- For the transfer to the Room Mode, press the Cool Button and the Button simultaneously for 3 seconds. At this time, the current temperature shows the room temperature, and the Room Lamp lights on.
- The cooling operation in the Room Mode is operated by the room temperature.
- For the transfer to the Spot Mode, press the Cooling Button and the Button simultaneously for 3 seconds again, the Room Lamp goes out and the current temperature shows the discharge temperature. The initial temperature is set as the Spot Mode operation.
- * Room Mode: To reduce the temperature of the entire room, select 'Room Cooling'
- * Spot Mode: For 'targeted' cooling of machinery, or people etc., select 'Spot Cooling'.



HOW TO USE

Temperature Control

- When the operation begins, the setting temperature is shown. The initial set temperature is 60°F.
- Press the temperature control button  , you can select the desired set temperature. The range of temperature control is 34~86°F. This is increased or decreased by the unit of 1°F
- Once the desired temperature is set, this blinks for 3 seconds, the motion is transferred to the set condition.



* The current temperature is shown 32~99°F, like that 'Lo' for the below 32°F, and 'Hi' for the over 99°F.

Error Indication

In case of a trouble during operation, various safety devices & sensor work and the state is shown at the indication part.



Check the High Pressure (HP) or Stop the Water Supply
If the pressure of compressor becomes high, the high pressure sensing switch works, and the compressor stops, then 'E1' is shown.



Check the Low Pressure (LP)
If the pressure of compressor becomes low, the low pressure sensing switch works, and the compressor stops, then 'E2' is shown.



Check the sensor
If the temperature sensor is cut or short-circuit, 'E3' is shown, and at this time the compressor works normally.



Check the anti-freezing (AF)
If the sensor is sustained below 25°F for preventing the freezing of the evaporator, the compressor stops and 'AF' is shown.



Check the water overflow
If the water-full sensor installed inside of the discharging pump senses it, the compressor stops and 'FU' is shown.

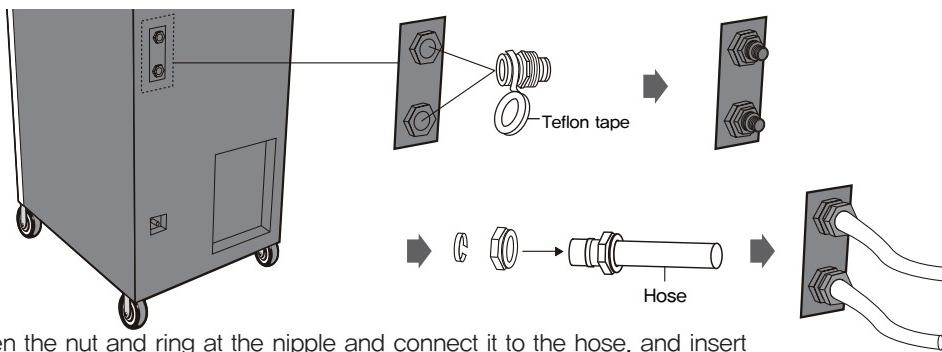
HOW TO INSTALL & PRECAUTIONS

Selection of the Installation Place

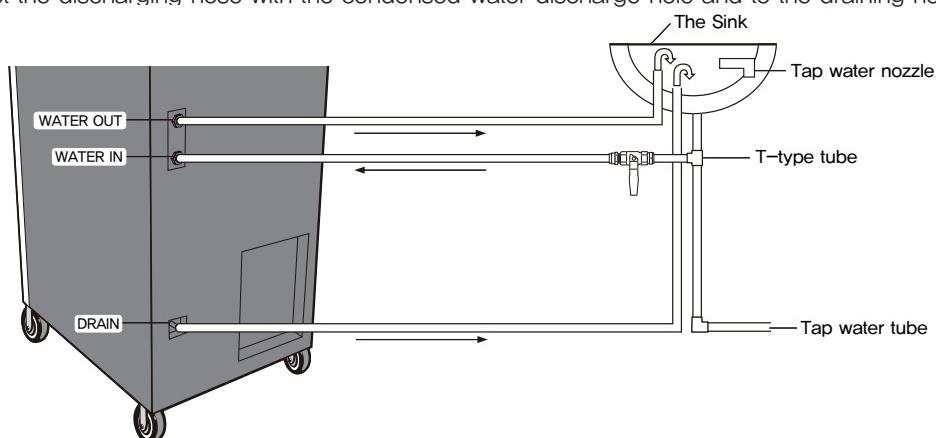
- As the air conditioner should be connected with the tap water tube, its installation near the hydrant is good.
- Install it on the even and stable place.

How to Connect Pipes

- Connect the nipple at the water in-taking hole and the water discharge hole of the backside of the air conditioner. At this time, wind the Teflon tape at the thread part and fasten it to the main body.



- Unfasten the nut and ring at the nipple and connect it to the hose, and insert the hose into the nipple and fasten it by using the nut.
(When connecting the hose, make the cut surface of the hose even.)
- Connect the water in-taking hole to the tap water tube (or a pressuring pump), and the water discharge hole to the drain hole.
(Pay attention for not changing the water in-taking hole with the discharging hole.)
- Connect the discharging hose with the condensed water discharge hole and to the draining hole.



- Once the pipe connection is finished, open the valve of water supply line so that water is supplied.
At this time, as water is discharged only when the air-conditioner is operated, check whether water is discharged from the drain hole.

HOW TO INSTALL & PRECAUTIONS

Check Points after Installation

- After confirming the state of pipe connection, check whether a leakage is at the connection part.
- Confirm whether the connection of the drain hose is good.
- Confirm whether the earth line is good.

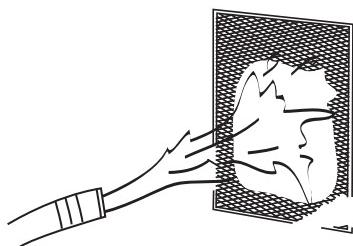
Precautions for Installation

1. Do the earth line work in good state without fail.
(Do not connect it to the gas pipe, water pipe or telephone line.)
2. Connect the power source of the air-conditioner to the exclusive cable or the correct voltage.
3. Do not connect the power line in the middle or extend it.
(Electric shock or fire may be caused.)
4. Do not install the unit at the place of an inflammable gas leakage or heat of fire.
(If the leaked gas is accumulated around the air-conditioner, a blast or fire may be caused.)
5. Note that if the drain hose is unstably set, water cannot be drained.
6. The standard pressure of water in-taking of this product is 28~71psig. When the pressure exceeds the standard, install a decompression device, and in case of lower pressure than the standard, install a separate device (Pressure pump, etc.).
7. When installation, the standard part supplied with the air-conditioner should be installed.
8. For piping for water in-taking or discharging, a hose may be used for a short distance (3~33 ft), and for a long distance more than 33 ft, a proper material (Matchable, X-L pipe) should be installed in principle.
9. Connect the pipe correctly not the in-take direction to be changed with the discharging one.
10. The exposed in-taking pipe should be thermally insulated.
(Condensation prevention of in-taking water and the prevention of freeze break in winter season.)

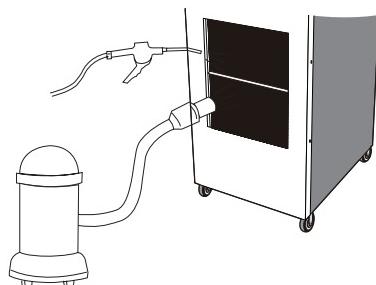
CLEANING AND MAINTENANCE

Cleaning the Air Filters and Maintenance

Cleaning of filter : Detach the filter from the A/C, and clean it with compressed air or water.



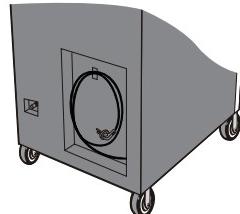
Cleaning of heat-exchanger : Clean dust attached to the heat-exchanger with compressed air or a vacuum cleaner.



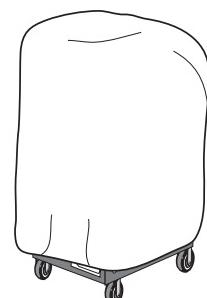
1. After cleaning, dry well the inside by blowing operation for 3~4 hours.



2. After stopping operation and pulling out the power cord, do wind well and fix the cord.



3. Note that moisture and dust not to enter into the unit.



※ When it is not used, close the valve of the water supplying line, and discharge the water in the line, and keep it after being dried.

TROUBLE SHOOTINGS

Symptom	Check Points	Measures to be Taken
The operation is not done.	<ul style="list-style-type: none"> ● Is the power plug pulled out? ● Is the operation stopped? ● Is the fuse cut? ● Is the circuit breaker fallen? ● Is the surrounding temperature too high? (Higher than 113°F) ● Is the voltage too low? 	<ul style="list-style-type: none"> ● Insert the plug. ● Press ON/ OFF switch, and confirm the lamp condition. ● Change the fuse of electric panel. ● After confirming the load capacity, raise the circuit breaker of the distribution panel. ● Use it at the place of 113°F and lower. ● Request an electricity construction company for the available rated voltage
The cooling is not well done.	<ul style="list-style-type: none"> ● Is the filter clogged with dust? ● Although the filter is clean, is the heat-exchanger clogged with much dust? ● Is there any obstacle in the in-taking part? ● Is the set-temperature correctly set? ● Is the water supply cut? ● Right after the operation stops, is the unit started to operate instantly? 	<ul style="list-style-type: none"> ● Clean the filter (Washing with water is OK.) ● Clean the heat-exchanger. ● Remove the obstacle. (Farther than 8inch.) ● For cooling, adjust the set temperature lower than the ambient temperature. ● Confirm the water supply valve is opened. ● Confirm that after 3 minutes, the compressor is normally operated and the cold air is being discharged.
When white vapor is generated during operation.	<ul style="list-style-type: none"> ● Is the unit being used where humidity is high. 	<ul style="list-style-type: none"> ● If the humidity is high, much air is discharged, and white vapor may be emitted.
When dew is formed at the discharging hole.	<ul style="list-style-type: none"> ● Is the room temperature too high? 	<ul style="list-style-type: none"> ● It is a phenomenon that the moisture in the air is changed into dew, and this is not abnormal.

SPECIFICATIONS & ACCESSORIES

MODEL		HWC-15
Cooling Capacity		13,800 Btu/h
Power Supply		115V a.c. 60Hz 1ph
Size (WxDxH)		17.5 X 22.5 X 42 (inch.)
Weight		159 lbs
Power Consumption		1.1 kW
Refrigerant		R410a 1.1 lb
AIR Filter		Aluminum Filter
Safety Device		High/Low Pressure Switch / Thermostat Protector for Compressor 3min. Delay Timer
Power Cord	type	Plug Type
	ft	9.8
Operating Conditions		72°F DB 60% RH ~113°F DB 40% RH
Maximum Duct Length		30ft
Water Flow at 85°F		2.9 GPM

ITEM					DRAWING	
AIR OUTLET	DUCT	Diam. 5inch	12inch	○		
			9.8ft	○		
	DUCT COVER			○		
	DAMPER BASE			○		
	ALUMINIUM FILTER CASSETTE			○		

WARRANTY

(Applicable to first retail purchaser only)

AIRREX WATER COOL AIR CONDITIONER give more reliable performance, comfort and durability the more they are used. They are built under a strict quality assurance regime which includes inspection both during and after production and exhaustive reliability testing.

In the unlikely event you have any problems, please contact your dealer or distributor. If the problem is as a result of a production fault or failure, repairs will be undertaken free of charge during the period of warranty subject to the following warranty conditions:

1. The warranty period is 12 months from the date of first purchase.
2. If the problem has been caused by customer error or misuse, abuse or damage, then all repairs will be charged for.
3. Proof and date of purchase must be supplied.
4. Please complete the details below and keep this warranty in a safe place.
5. All transport charges back to the dealer are at the customers cost. Keep all original packaging to facilitate return. Return to customer will be at dealers cost (if genuine warranty claim).

DESCRIPTION		AIRREX WATER COOLED AIR CONDITIONER	
MODEL		HWC-15	
DATE OF PURCHASE		PRODUCT SERIAL NO:	
Warranty Period		(Months)	
DISTRIBUTOR	Name of Company		
	Telephone No.		
CUSTOMER DETAILS	Name :		
	Address :		
	Telephone :		

MEMO.



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- Designs and specifications of products are subject to change without prior notice for the improvement of products.